Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



THE PLANT DISEASE REPORTER

Issued By

PLANT DISEASE EPIDEMICS
and
IDENTIFICATION SECTION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

SUPPLEMENT 230

INDEX TO SUPPLEMENTS 224-229, 1954

Supplement 230

Issued June 15, 1955





The Plant Disease Reporter is issued as a service to plant pathologists throughout the United States. It contains reports, summaries, observations, and comments submitted voluntarily by qualified observers. These reports often are in the form of suggestions, queries, and opinions, frequently purely tentative, offered for consideration or discussion rather than as matters of established fact. In accepting and publishing this material the Plant Disease Epidemics and Identification Section serves merely as an informational clearing house. It does not assume responsibility for the subject matter.

SUBJECT INDEX

--- saccharum: Valsa leucostomoides, 144 Africa, 112 Agrobacterium tumefaciens, 140, 141, 142 Alabama, 77, 90, 94, 149 Alfalfa: diseases in Wis. 137; downy mildew, 137; leaf spot, 137; root rot (Phytophthora sp.) 1st rept. on this host (Calif.), 128: wilt-producing Fusaria from cotton and Cassia infect alfalfa, 137; witches' broom virus, 138 Almond: crown gall, 140 Alternaria sp(p)., on chile in N. Mex., 150; fungicides, 54 --- blight, of carrot, 151 --- brassicae, 58 --- brassicicola, 58 --- cucumerina, 58 --- dauci, 58, 151 --- dianthi, 58 --- panax, 58 --- porri, 58 --- solani, 58 --- tenuis, 58 Ambrosia artemisiifolia: nematodes assoc., Andropogon virginicus: nematodes assoc., 105 Anguina tritici, 78; viability over a period of 14 yrs. dormancy, 135 Anthracnose, of blueberry, 141; cucumber, 151; Lotus uliginosus, 137; Rosa spp., 143; Viburnum opulus var. roseum, 143; watermelon, 151; wild blackberry, 141 --- spot, of Cornus florida, 144 Aphelenchoides fragariae, 139. 142 Aphelenchus avenae, 140, assoc. with citrus roots in U.S., 1st rept., 138 Aplopappus divaricatus: nematodes assoc., 105 Apple: bitter rot, 139; black pox, 111, 1st rept. from Ga., 126; blotch, 139; cedar rust, 139; fire blight, 139; fly speck, 139, 140; leaf spot, 139; powdery mildew, 139; scab, 139; scald, role of cutin and effect of mineral oil on in storage, 140; sooty blotch, 139 Apricot: brown rot, in Calif., 138 Arachis hypogaea: Belonolaimus, 102; fungi assoc. with diseases of, 146; ring nematode (Criconemoides), 80; rust, 146 Arecastrum romanzoffianum: butt rot, 144 Aristida: nematodes assoc., 105 Arizona, 80, 127, 132, 147, 149, 152 Arrhenatherum elatius: eyespot, 1st rept. from Wash., 126 Articularia quercina, on pecan, 127 Ascochyta gossypii, 147 Aster ericoides: nematodes assoc., 105

Acer platanoides: copper spray injury, 143

Bacterial blight, of Chrysanthemum morifolium, 130; cotton, 147; raspberry, 141 --- leaf spot, of pepper, 150: of Ricinus communis 129, 149; of squash, 151; --- parasite, on Tamarix pentandra. 132 --- scab, of Gladiolus spp., 142 --- spot, of peach, 140; pepper, 152; tomato, 152 --- stem rot, of Pelargonium hortorum, --- wilt, of corn, 136 --- wilt, of tobacco, 148 Bacterium stewartii, 136 Barley: powdery mildew, reaction of vars. and selections to physiological races of, 134; seed-borne virus, 134 Bean: alfalfa mosaic virus, 153; blight, 153; halo blight, streptomycin sulphate sprays for control, 153; rust, 153; tobacco mosaic virus, 153; Tylenchorhynchus dubius, 80; white mold in Idaho, 153 ---, lima: fungicide-insecticide seed treatments, 153 Belonolaimus, 90, 102; on peanut in Va., 102 --- gracilis, 77, 83; on cowpea, 137; on soybean, 137 Bentonite dust, 141 Beta vulgaris: curly top virus, 146 Betula lutea: canker and decay, 144 Bitter rot, of apple, 139 Blackberry, wild: anthracnose, 141 Black crust, of Hevea, 40 --- mold, of Rosa spp., 143 --- patch, of Lotus uliginosus, 137 --- pox, of apple, 111, 126 --- root rot, of cotton 147; of tobacco, 148 --- shank, of tobacco, 77, 148 --- spot, of Rosa spp., 143 --- stripe, of Hevea brasiliensis, 37 Blast, of grasses (new hosts), 128 Blight, of bean, 153; cotton, 147; Liquidambar styraciflua, 144; oats, 134 ---, summer, of Lotus uliginosus, 137 Blotch, of apple, 139 Blueberry: anthracnose, 141; ring spot (virus), 141; stem canker, 141 Blue mold, of tobacco, 148 Botrytis cinerea, 3, 139 --- f. convallariae, 6 --- convoluta, 6 --- croci, 6 --- diseases of gladiolus, Suppl. 224, pp. 1-33 --- elliptica, 4

PLANT DISEASE REPORTER SUPPLEMENT

Issued by

PLANT DISEASE EPIDEMICS AND IDENTIFICATION SECTION

INDEX TO PLANT DISEASE REPORTER SUPPLEMENTS 224-229, 1954

Compiled by Nellie W. Nance

Horticultural Crops Research Branch Supplement 230 Plant Industry Station, Beltsville, Maryland Index to Supplements, 1954

LIST OF SUPPLEMENTS

- Supplement 224. Botrytis diseases of Gladiolus. pp. 1-33. May 15, 1954. By Charles J. Gould.
- Supplement 225. Hevea diseases of the Western Hemisphere. pp. 36-52. May 15, 1954. Articles by various authors; see its table of contents and author index below.
- Supplement 226. The efficacy of fungicides in the control of certain genera of plant-pathogenic fungi: literature review. pp. 54-71. July 15, 1954. By P. M. Miller and M. B. Linn.
- Supplement 227. New developments and new problems concerning nematodes in the South: a symposium. pp. 74-107. October 15, 1954. Papers presented at the Dallas meeting, Southern Division, American Phytopathological Society, Dallas, Texas, February 1-3, 1954. See its table of contents and author index below.
- Supplement 228. Helminthosporium problems: a symposium. pp. 110-119. October 15, 1954. Papers presented at the Dallas meeting, Southern Division, American Phytopathological Society, Dallas, Texas, February 1-3, 1954. See its table of contents and author index below.
- Supplement 229. Some new and important plant disease occurrences and developments in the United States in 1953. pp. 122-154. December 15, 1954. Compiled by Nellie W. Nance.
- Supplement 230. Index to Supplements 224-229. pp. (156-167). Issued June 15, 1955). By Nellie W. Nance.

AUTHOR INDEX

Cairns, Eldon J., 75 Carpenter, J. B., (37) Cordner, H. B., 92

Dieter, C. E., 98

Gorenz, A. M., (37) Gould, Charles J., 3 Graham, T. W., 80, 89

Holdeman, Q. L, . 77, 81

Imle, E. P., (37) Ivanoff, S. S., 84

Langford, M. H., 37, 42 Linn, M. B., (54) Luttrell, E. S., 111 Machmer, John H., 102 Manis, W. E., (37), 49 Martin, W. J., 86 McBeth, C. W., 95 Miller, P. M., 54 Morrison, Lou, (92)

Nance, Nellie W., 122

Rosen, H. R., 114

Smith, Albert L., 90, 94 Struble, F. Ben, (92)

Townsend, C. H. T., Jr., (42)

Ullstrup, Arnold J., 116, 118

--- citrullina, 68 (Botrytis) galanthina, 6 --- cruciferarum, 68 --- gladioli, 4 --- cruenta, 68 --- gladiolorum, 3 --- fici, 68 --- hyacinthi, 6 --- fusca, 141 --- narcissicola, 6 --- mali, 68 --- polyblastis, 6, 142 --- obscura, 68 --- tulipae, 6 --- purpurea, 68 --- yuae, 132 --- rubi, 68 Brachysporium, 111 --- unamunoi, 132 Brazil, 42, 49, 50, 54 --- viticola, 68 Brevipalpus, 138 Cereal smuts, fungicides for control of, 134 British Columbia, 3, 54 Broccoli: Pseudomonas maculicola, 150 Cereals and grasses: abnormalities caused by nematodes, 84 Bromus marginatus: head smut, 136 Ceresan M, 136 Brown leaf spot, of pecan, 141 --- rot, of apricot, 138; of Citrus spp., 138; Ceylon, 49 of peach, 140; of stone fruits, 138 Chalaropsis thielavioides, 143 Buckeye rot, of Lilium regale, 130 Charcoal rot, of corn, 136 Chenopodium album: potato calico (virus), Bunt, of wheat, 135 1st rept. on this host (Maine), 130 ---, dwarf, of grasses (new hosts), 128; Cherry: "Eckelrader" disease, importaof wheat, 135 tions from Europe, 140 Burma, 49 Chlorobromopropene, 152 Butt rot, of Arecastrum romanzoffianum, 144 Chlorosis and decline, of peach, 78 Cabbage: autogenous necrosis, 1st rept. on Chrysanthemum spp.: Noordam's B virus this plant (Wis.), 132; downy mildew, in the U.S., 142 150 --- morifolium: bacterial blight, hitherto Calcium cyanamide, for tobacco bed weed unreported disease of greenhouse chryscontrol, 149 anthemums (Mass., Fla., N. C., Conn., --- sulfamate, 135 Pa.), 130 California, 3, 127 ff., 137 ff., 143 ff., 150 ff. Cinnamomum zeylanicum: Phytophthora cin-Camellia: dieback and canker, 142; leaf and namomi, 143 flower variegation, transmission by Circular spot, of sweetpotato, 151 grafting, 142 Circulifer tenellus, 146 Canada, 3 Citrus spp.: brown rot, 138; crinkle scurf, Canker, of camellia, 142; peach, 140; and 138; exocortis (virus), 126; new virus decay, of Betula lutea, 144 disease (Calif.), 128; scaly bark, 138; Cantaloupe: Meloidogyne incognita, 151 spreading decline, 140, in Fla., 138; Capitophorus fragaefolii, 139 stem pitting, 138; Winter Haven decline Captan, 139, 144 in Texas, 139 Carneocephala flaviceps, 141 Cladosporium carpophilum, 140 Carrot: Alternaria blight, 151 --- cucumerinum, 151 Castorbean, see Ricinus --- effusum, 141 Catacauma huberi, 40 Clitocybe root rot, of peach, 140 Cauliflower: club root, 150 --- tabescens, 140 Cedar rust, of apple, 139 Club root, of cauliflower, 150 Celery: diseases, 150 Cochliobolus heterostrophus, 118 Celosia argentea var. cristata: damping-Colchicum: Botrytis spp., 6 off, 1st rept. on this host (Tenn.), 130 Colombia, 42, 48 Central America, 37, 49, 140 Colorado, 129, 134, 142, 150 Central Rocky Mountain States, 131 Colletotrichum spp.: fungicidal efficacy, 54 Cephalothecium roseum, 141 --- antirrhini, 58 Ceratostomella fimbriata, 39 --- gloeosporioides, 40, 68 Ceratostomella ulmi, 146 --- gossypii, 68 Cercospora spp.: fungicidal efficacy, 54 --- hibisci, 147 --- apii, 58 --- higginsianum, 58 --- aurantia, 68 --- lagenarium, 58, 151 --- beticola, 58 --- lindemuthianum, 58 --- capsici, 68 --- phomoides, 58, 152 --- carotae, 58 --- truncatum, 58, 137 --- circumscissa, 68 Connecticut, 130, 139, 148, 151, 152, 154

Control, of Aphelenchoides fragariae on Lilium spp., in Oregon, 142; of celery seedbed diseases with methyl bromide, 150: of covered-kernel smut of sorghum, in Colo., 134; of diseases of potato by disease resistance, 154; of Fabraea maculata on English hawthorn, seven fungicides tested, 144; of gray mold of strawberry with captan, 139; of head smut of brome grass with Ceresan M and Panogen, 136: of leaf blight (South American) of Hevea rubbertrees, 42; of nematode-Fusarium wilt complex of cotton, with soil fumigant, 98; of panel decay of Hevea brasiliensis, 38; of Phytophthora root rot of avocado, 140; of rose diseases, 143 Convallaria: Botrytis spp., 6 Copper dust, 141 Copper-Hydro, 150 Copper 8-quinolinolate (Bioquin 1), for control of apple diseases, 139 Copper spray injury, to Acer platanoides, 143 Copper sulfate, 140 Corm rot, of gladiolus, 3 Corn: bacterial wilt, 136; charcoal rot, 136; crazy top (cause unknown), 1st rept. from N. Y., 126; ear rot, 136; Helminthosporium diseases, 118; leaf blight, 135; northern leaf blight, 136; Pratylenchus leiocephalus, 136; rust, 136; smut, 136 Cornus florida: spot anthracnose, 144 Corticium galactinum, on Pinus strobus, 144 --- salmonicolor, 40 Corynebacterium tritici, 78 Costa Rica, 42, 54 Cotton: bacterial blight, 147; black root rot, 147; blight, 147; Colletotrichum gossypii, 147; loss estimating, 146; losses 147; mean rating for root galls on 7 vars. with isolates of root knot nematodes, 87; nematode-Fusarium wilt complex, 77, 98; nematodes, problems in breeding for resistance to, 90; nematodes assoc. with, in southern Georgia, 104; nub rot, 147; Pratylenchus pratensis, 90; pre-harvest weathering effect on fiber properties, 147; Tylenchorhynchus dubius, 80, 147; wilt; 77, 98, 147 Cowpea: Belonolaimus gracilis, 137 Crataegus oxyacantha rosea: leaf spot 144 Crazy top, of corn, 126 Criconemoides, 102; on peanut, 80; on tobacco, 80 --- citri, 140 Crinkle-scurf, of Citrus spp., 138

Crown canker, of Rosa spp., 143

--- gall, of almond, 140

--- rust, of oats, 134 Cucumber: anthracnose, 151; downy mildew, 151; scab, 151 Cucurbits: Meloidogyne sp., 84 Curvularia, 111 Cylindrocarpon radicicola, meadownematode assoc., with plant species, 78 Cylindrocladium scoparium, 143 Cynodon dactylon, 105 Cyperaceae: nematodes assoc., 105 2, 4-D, 152 D-D. 95 D-D and ethylene dibromide, for control of root rot and stem rot of tobacco, 78 D-D Hi-Sil, 150 Dactylis glomerata: nematode (Anguina) seed-gall disease, 137 Damping-off, of Celosia argentea var. cristata, 130; of nursery ornamentals, 141 Datura meteloides: mosaic (virus), 149 Deficiency diseases, of celery, 150 Delaware, 148, 151 Dematophora root and crown rot, of strawberry, 129 Diabrotica undecimpunctata, 151 Dianthus spp.: aster yellows (virus), 142 --- caryophyllus: greasy blotch, 140; pimple (Xanthomonas oryzae new var.), in Colo., 129 Dieback, of camellia, 142; of Hevea benthamiana, 37; of Hibiscus cannabinus, 147 ---, leader, of Liquidambar styraciflua, 144 Digitaria ischaemum: rust (Puccinia oahuensis), 1st rept. from La., 126 --- sanguinalis: Belonolaimus gracilis, 137; nematodes assoc., 105; rust (Puccinia oahuensis), 1st rept. from La. 126 Dilophospora alopecuri, 78 Diodia teres: nematodes assoc., 105 Diplocarpon rosae, 143 Diplodia theobromae, 38 Diplodina persicae n. sp., 129 Diseases of cereal crops, 134; forage and cover crops, 136; fruit crops, 138; nut crops, 141; ornamentals, 141; special crops, 146; vegetable crops, 149 Dithane, 150 Dithane Z-78, 38, 44 Dock, curly: ring spot-like virus, 153 Dorylaimids, assoc. with avocado roots, 140 Dorylaimus, 84, 103 Dothidella ulei, 42 Dowfume W 40 and DD, 94 Crocus: Botrytis spp., 6; Botrytis gladiolorum, Dowfume W 85, 94 Downy mildew, of alfalfa, 137; cabbage, 150; cucumber, 151; Sorghum halepense, possible relationship with downy mildew of sugarcane, 134; soybean, 137

of Helianthus annuus, 142; of peach,

140; of pecan, 141; of prune, 140

--- rot, of Trifolium pratense, 138

160 Downy spot, of pecan, 141 Drosophila melanogaster, 145 Dutch elm disease, of Ulmus spp., 146 Dwarf, of strawberry, 139 Ear rots, of corn, 136 EDB, 95 Efficacy of fungicides: a literature review, Suppl. 226: 54-71 Eleusine coracana; Helminthosporium nodulosum, 111 Elsinoë ampelina, 141 --- corni, 144 --- veneta, 141 Endoconidiophora coerulescens f. douglasii n. form, 131 --- fagacearum, 132, 144 Endria inimica, 135 Erwinia amylovora, 139, 141 --- f. sp. rubi, 141 --- chrysanthemi, 129 Erysiphe cichoracearum, 142 --- graminis, 134, 135 Eupatorium tenuifolium: nematodes assoc., 105 Europe, 140 Eyespot, of Arrhenatherum elatius, 126 Fabraea maculata, 139, 144 "False broomrape", (undet), of tobacco, 131, 149 Ferbam, 149 Fermate, 38 Fig: walnut branch wilt, 1st rept. on this host (Calif.), 129 Fire blight, of apple, 139; of pear, 141 Flax: rust, epidemiology, 134 Florida, 3, 77, 126, 130 ff., 135, 136, 138, 140, 141, 147 ff., 151, 154 Fly speck, of apple, 139, 140 Fomes annosus, on Pinus elliotti, 144 --- lignosus, 39 --- noxius, 39 Forecasting late blight of potato and tomato, Fragaria spp.: strawberry dwarf, 139 --- chiloensis var. ananassa: buckeye rot, 1st rept. on this host (Tenn.), 129 Freesia: Botrytis spp., 6; Botrytis gladiolorum, 5 Fruit rot, of peach, 129 Fruits, stone: brown rot, 138 Fumigation for nematodes; theory and practice, 94 Fungicides: efficacy in control of 4 genera of plant-pathogenic fungi, 54; for control of cereal smuts, 134

Fusarium sp(p.), 112; on celery, 150; on

chile in N. Mex., 150

--- moniliforme, 136

--- nivale, 135

--- oxysporum f. conglutinans, 153 --- f. gladioli, 30 --- f. lycopersici, 78, 152 --- f. nicotianae, 78, 148 --- f. vasinfectum, 77, 90, 147 --- solani, 149 --- wilt, of cotton, nematodes assoc., 77; of radish, 153; of Sesamum spp., 149; of tobacco, 148; of tomato, 77, 152, root knot nematode assoc., 77 Fusicoccum amygdali, 140 Ganoderma sulcatum, 144 Georgia, 78, 80, 102, 111, 126, 127, 137, 140 148, 149, 150, 152 Gerardia tenuifolia: nematodes assoc., 105 Germany, 54 Gladiolus: bacterial scab, 142; Botrytis diseases, 1-33; corm rot, 3; Fusarium oxysporum f. gladioli, 30; leaf and flower blight, 3; western aster yellows virus, inoculation with produces symptoms of grassy top, 142 Glassy-end and jelly-end, of potato, 154 Gloeodes pomigena, 139 Glomerella cingulata, 40, 139, 142 --- dieback, of Hevea, 40 --- phomoides sp. nov., 152 Glume blotch, of wheat, 126, 135 Grafting failure, of ornamental plants, 142 Grape: Pierce's disease (virus), 141 Grasses: diseases observed in 1953 on new hosts in Wash., 128; yellow dwarf virus, 137 "Gray leaf" or "dirty leaf", of Peperomia obtusifolia var. variegata. 143 Gray mold, of strawberry, 139 Greasy blotch, of Dianthus caryophyllus 140 Growth-retarding disease, of sugarcane, 149 Guatemala, 48 Guayule, see Parthenium Gymnosporangium juniperi-virginianae, 139 Halo blight, of bean, 153 Hawaii, 54 Hedera helix: scab, 142 Helianthus annuus: Erysiphe cichoracearum cultured on sunflower crown gall tissue, 142 Helicobasidium root disease, of Hevea, 39 Helicotylenchus, 83, 102 Helminthosporium, approaches to classification 111; problems, Suppl. 228, pp. 111-119; variations within species, 116 --- avenae, 113 --- bromi, 113 --- carbonum, 116, 118 --- diseases, of corn, 118 --- gramineum, 112 --- leucostylum, 112 --- maydis, 116, 118

(Helminthosporium) nodulosum, 111
--- oryzae-sacchari, 112
--- panici, 111
--- papulosum, 111, 126

--- papulosum, 111, 126 --- rostratum, 119

--- sacchari, 112

--- sativum, 112, 114, 119, 135

--- var. victoriae, 114

--- siccans, 112

--- sorokinianum, 112

--- teres, 113

--- tritici-repentis, 113
--- tritici-vulgaris, 135

--- turcicum, 116, 118, 136

--- velutinum, 111

--- victoriae, 112, 114, 134; variation in pathogenicity and evidence for its relationship to H. sativum, 114

Hemicycliophora sp. 138

Hendersonula toruloidea, 129, on Populus fremontii, 144

Heterotheca subaxillaris: nematodes assoc., 105

Hevea: black crust, 40; dieback, 49; Diplodia theobromae, 38; diseases in the Western Hemisphere, Suppl. 225, pp. 36-52; Glomerella dieback, 40; Helicobasidium root disease, 39; leaf blight, 42; leaf blight, South American, 42; moldy rot, 39; Periconia blight, 40; Phytophthora leaf fall, 49; pink disease, 40; root diseases, 39

--- benthamiana: dieback, 37; Periconia blight 40;

--- clone F 4542: blight resistant breeding clone, 46

--- brasiliensis: black stripe, 37; leaf blight, South American 37; leaf fall, 37; panel decay, 37; Periconia blight, 40, 41; Phytophthora palmivora, 37; Phytophthora pod rot, 37; target leaf spot, 38

--- guianensis: Periconia blight, 40

--- spruceana: Periconia blight, 40, 41 Hibiscus cannabinus: dieback, 147

Holland, 3

Hoplolaimus coronatus, 138

Hormodendrum sp., on chile in New Mex., 150

Host range of nematodes, value of greenhouse tests in evaluating, 81

Hot-water treatment of virus infected strawberries, 139

Hyacinthus: Botrytis, spp., 6 Hylemyia rubivora, 141

Hylurgopinus rufipes, 146

Hypericum gentianoides: nematodes assoc., 105

Idaho, 153 Illinois, 3, 131, 133, 135 ff., 145, 146 India, 49, 112 Indiana, 134, 135 Internal browning, of tomato, 152
--- mold, of pepper, 150
Iowa, 136, 137, 154
Iris sp.: topple disease in N.Y., 142

Juglans regia: Phytophthora cinnamomi, 144

Kansas, 134, 137 Karathane, 139 Kentucky, 131, 148, 149

Late blight of potato, 153; tomato, 152 Leaf blight of corn, 135; of Hevea, 42

--- South American, of Hevea, 37, 42 --- blotch, peach, of pecan, 141

--- disease, of pepper, 132

--- fall, of Hevea brasiliensis, 37

--- and flower blight of gladiolus, 3

--- rust of grasses (new hosts) 128; Poa spp. 137; rye 134; wheat 135

--- scorch, of pecan, 141

--- spot, of alfalfa, 137; of apple, 139; of Crataegus oxyacantha rosea, 144; of lettuce, 132; of peach, 140; of wheat, 135;

--- streak, of grasses (new hosts), 128 Leptothyrium pomi, 139 Lespedeza sericea: Meloidogyne incognita

var. acrita, 81

Lettuce: big vein (virus), 152; injury from 2, 4-D in Calif., 152; leaf spot (Stemphylium botryosum f. lactucum forma nova) (Calif.), 132; mosaic (virus), 152; tobacco-ringspot virus, strain of, (Calif.) 1st rept. on this host, 132

Ligustrum obtusifolium var. regelianum: witches'-broom (virus), 143

--- ovalifolium: ringspot (virus), 144

Lilium spp.: Aphelenchoides fragariae, 142; Botrytis spp., 6

--- regale: buckeye rot, 1st rept. on this host (Tenn.), 130

Lime-sulfur, 139

Liquidambar styraciflua: blight, 144; leader dieback, 144

Lobularia maritima: poor germination of seed, 142

Losses: from Botrytis and Curvularia in United States, 3; from cotton nub rot in Texas, 147; from cotton wilt in Tenn., 147; in cotton, 146, 147; in forage legumes and grasses in N. Y., 136

Lotus corniculatus: Stemphylium loti n. sp. (N. Y.), 128

--- uliginosus: anthracnose, 137; blackpatch, 137; southern blight, 1st rept. on this host (Ga.), 128, 137; summer blight, 137

Louisiana, 80, 86, 126, 129, 134, 137, 144, 149, 151

Lumber staining, of Douglas fir, 141,

Macrophomina phaseoli, 136 Maine, 130, 141, 154 Malaya, 49 Manganese ethylene bisdithiocarbamate, 151 Manzate, 144 Marmor citrulli sp. nov., 133 --- var. flavidanum, var. nov., 133 Maryland, 3, 129, 141 ff., 148, 149, 151 Massachusetts, 3, 130, 140 Melampsora lini, 134 Melilotus spp.: diseases in Wisconsin, 137 Meliola spp., 111 Meloidogyne sp(p.), 77, 102, on cucurbits, 84 --- arenaria, 103 --- incognita, 77, 86, 92, 151, 152 --- var. acrita, 81, 86 Mentha spp.: nematodes assoc. with disease, 148; rust, 148 Metaldehyde dust, 143 Mexico, 37, 39, 140 Michigan, 3 Microsphaera alni, 141 Microstroma juglandis var. robustum, 127 Microthyriella rubi, 140 Minnesota, 137 Mississippi, 84, 134, 151 Moldy rot, of Hevea, 39 Monilinia spp., on stone fruits, 138 --- fructicola, 138, 140 --- laxa, 138 Mononchus, 103 Muscari: Botrytis spp., 6 Mycosphaerella caryigena, 141 --- dendroides, 141 Myzus persicae, 152

Nabam, 151 Napicladium, 111 Narcissus: Botrytis spp., 6; Botrytis polyblastis in Oregon, 142, Nebraska, 137 Necrosis, autogenous, of cabbage, 132 Nematode(s), (see also under genera and hosts), assoc. with 16 common weeds, 105; complex in southern Georgia, 102; control to prolong productive period of white clover in Ga., 106; ectoparasitic, recent developments with, 80; parasitic plant abnormalties caused by, 83; possible members of disease complexes involving other plant pathogens, 77; soil fumigation, practical aspects of, 95 Nematology, plant: science or service?, 75 New developments and new problems concerning nematodes in the South, Suppl. 227: 74-107 New host: southern blight on Lotus uligi-

nosus in Ga., 137

New Jersey, 3, 141, 144, 151, 152

New Mexico, 127, 130, 132, 135, 142, 147, 150

New York, 3, 126, 128, 135, 142, 150, 154

New Zealand, 54

Nicaragua, 48

Nicotiana: relation of host nutrition to multiplication of viruses, 149

--- glauca: mosaic (virus), 149

North Carolina, 3, 77, 111, 130, 148, 151

Northern leaf blight, of corn, 136

Nub rot, of cotton, 147

Nursery ornamentals: damping-off fungi, 141

Oats: blight, inheritance of susceptibility to, 134
--- crown rust, 134; Helminthosporium victoriae, 114; Panagrolaimus rigidus, 84; powdery mildew, 134; soil-borne viruses, 134; "spikelet"

drop", cause unknown, 134; stem rust, 134

Oedema, of Peperomia obtusifolia var. variegata, 143 Ohio, 130, 139

Oidium sp., on tobacco, 148 Oklahoma, 92, 129, 149

Onion: purple blotch, limiting factor in Arkansas Valley of Colorado, 150; smut, 150

Ontario, 3, 54
Ophiobolus sativus, 115
Oregon, 128, 137, 139, 141, 142, 148, 153
Ornamental plants: curly top (virus),

natural infection, 142; grafting failure (Thielaviopsis basicola), 1st rept., 142

Panagrolaimus rigidus, 84
Panama, 42
Panel decay, of Hevea brasiliensis, 37
Panogen, 136, 141, 149
Paratylenchus, 83, 102
Parthenium argentatum: root rot, 149
Paspalum sp.: nematodes assoc., 105
Parzate, 44

Parzate, 44

Pea: virus disease complex, 153

Peach: bacterial spot, 140; brown rot tests of organic fungicides for control of, 140; canker and leaf spot, 140; Clitocybe root rot, 140; crown gall, 140; decline and chlorosis, nematodes assoc; 78; fruit rot (Diplodina persicae n. sp.), in La., 129; phony disease (virus), 140; ring spot (virus), not present at Fort Valley, Ga., 140; scab, 140; wart (virus) 1st rept. from N. Mex., 127; western X-disease (virus) 1st rept. from Ariz., 127

Peanut: See Arachis Pear: fire blight, 141

Pecan: Articularia quercina, 1st rept. from Okla., 127; brown leaf spot, 141; crown gall, 141; downy spot, 141; leaf scorch (cause unknown), 141; Microstroma juglandis var. robustum, 1st rept. from Okla., 127; pecan leaf blotch, 141; pink rot, 141; powdery mildew, 141; rosette (zinc deficiency), 141; scab, 141. Pegomyia rubivora, 141 Pelargonium hortorum: bacterial stem rot, Pellicularia filamentosa, 38, 137 Penicillium gladioli, 24 Pennsylvania, 130, 132, 139, 145, 149, 151 Peperomia obtusifolia var. variegata: cutting rot, 143; "gray leaf" or "dirty leaf", 143; oedema (?virus), 143; slugs feeding on leaves, 143 Pepper: bacterial spot, 150, control with Agrimycin, 152; internal mold, 150; leaf disease ("velvet spot"), colonies of Cercospora unamunoi parasitized by Botrytis yuae sp. nov. (Fla., Tex., Calif.), 132 ---, sweet: ring spot (virus), 151 Periconia blight, of Hevea, 40 --- heveae, 40 Peronospora manshurica, 137 --- parasitica, 150 --- tabacina, 148 --- trifoliorum, 137 Persea americana: Phytophthora root rot, 140; spreading decline, 140 Peru, 42 Philippine Islands, 42 Philodendron cordatum: Sclerotium rolfsii, 1st rept. on this host, (Calif.), 130 Phoradendron juniperinum: rust, 1st rept. on this host (N. Mex.), 130 Phorbia rubivora, 141 Phragmidium spp., on Rosa spp., 143 Phygon XL, 150 Phyllosticta solitaria, 139 Phytophthora sp., on alfalfa, 128 --- cinnamomi, 143, 144 --- cinnamomi, on Persea americana, 140 --- cryptogea, 128 --- fragariae, 139 --- infestans, 152, 153 --- palmivora, 37, 49 --- parasitica, 129, 130, 131, 138 --- --- var. nicotianae, 77, 148 --- trunk rot, of Washingtonia filifera, 131 Pimple, of Dianthus caryophyllus, 129 Pimples, of watermelon, 151 Pink disease, of Hevea, 40 --- root, of shallot, 150 --- rot, of peacn, 141 Pinus elliotti: Fomes annosus, 144 --- strobus: Corticium galactinum, 144

Plasmodiophora brassicae, 150 Pleospora trichostoma, 113 Plum: phony disease (virus), 140 Poa spp.: leaf rust, 137; stem rust, 137 Pod rot, of Theobroma cacao, 49 Podosphaera leucotricha, 139 Polysulfide Compound, 139 Populus spp.: surface sterilization of poplar cuttings for disease control, 144 --- fremontii: Hendersonula toruloidea, 144 Potato: calico (virus), spread from alfalfa and Ladino clover fields, 154; curly top virus, 154; glassy-end and jelly-end (non-parasitic), 154; late blight, 153; scab, 154; scurf, 154; wart, 154 Powdery mildew, of apple, 139; barley, 134; oats, 134; pecan, 141; Rosa spp., 143; tobacco, 148; wheat, 135 Pratylenchus spp., 83, 102 --- leiocephalus, on corn, 136 --- penetrans, 136 --- (?) pratensis, 77 --- pratensis, 90, 138, 140 --- vulnus, 136 Prune: crown gall, 140 Prunus avium: Verticillium wilt, 1st rept. from Calif., 127 Pseudomonas sp., on blueberry, 141 --- lachrymans, 151 --- maculicola, on broccoli, 150 --- marginata, 142 --- medicaginis f. phaseolicola, 153 --- solanacearum, 148 --- tabaci, 148, 149 Pseudoperonospora cubensis, 151 Pseudopityophthorus minutissimus, 145 --- pruinosus, 145 Pseudoplea briosiana, 137 Pseudotsuga taxifolia: lumber staining (Endoconidiophora coerulescens f. douglasii n. form.), 131 Puccinia arachidis, 146 --- coronata, 115, 134 --- glumarum, 128 --- graminis, 134, 137 --- --- tritici, 135 --- menthae, 148 --- poae-sudeticae, 128 --- rubigo-vera, 137 --- --- secalis, 134 --- --- tritici, 135 --- sorghi, 136 Purple blotch, of onion, 150 Pyrenochaeta terrestris, 150 Pythium sp., on celery, 150 --- ultimum, 139, 141 Queen palm, see Arecastrum Quercus spp.: oak wilt, 144 --- agrifolia: oak wilt, 1st rept. on this host (Ill.), 131

--- chrysolepis: oak wilt, 1st rept. on this host (Ill.), 131 --- ilicifolia: oak wilt, first rept. on this host, found infected in nature (Pa.), 132 --- stellata: drought and frost injuries, 145 Races (see also strains); of Stemphylium botryosum, on alfalfa, 137; of Ustilago tritici, 135; parasitic, of Meloidogyne incognita and M. incognita var. acrita, Radish: Fusarium wilt, 153 Radopholus similis, 138, 140 Raspberry: bacterial blight, 141 ---, red: technique for indexing for viruses, 141 Reaction, of wheat vars. to Septoria nodorum, 135 Red stele, of strawberry in Oregon, 139 Resistance, to red stele root disease in breeding strawberries in Oregon, 139; to rust and to soil-borne mosaic viruses, in oats, 134 Rhizoctonia aerial blight, of soybean, 137 --- solani, 137, 141, 143, 147, 150, 154 Rhode Island, 140, 143 Rhubarb: ringspot-like virosis, 153 Rhynchosporium orthosporum, 128 --- secalis, 128 Richardia scabra: nematodes assoc., 105 Ricinus communis: bacterial leaf spot, 149, 1st rept. in U. S. (Md., Okla., Tex.), 129 Root diseases, of Hevea, 39 --- rot, of alfalfa, 128; of Parthenium argentatum, 149; of wheat, 135 Rosa spp.: anthracnose, 143; black mold, 143; black spot, 143; Capitophorus fragaefolii, 139; crown canker in Del., 1st rept. in field, 143; powdery mildew, 143; rust, 143 Rosellinia necatrix, 129 Rosette, of pecan, 141 Rot, cutting, of Peperomia obtusifolia var. variegata, 143 Rotylenchus spp., 102 Ruga verrucosans, 142, 146 Rust, of Arachis hypogaea, 146; bean, 153; corn, 136; Digitaria spp., 126; flax, 134; Mentha spp., 148; Phoradendron juniperinum, 130; Rosa spp., 143 Rutabaga: Botrytis spp., 5 Rye: leaf rust, 134 Scab, of apple, 139; cucumber, 151; Hedera helix, 142; peach, 140; pecan, 141; potato, 154 Scald, of apple, role of cutin in and effect of

mineral oil on storage, 140; of grasses

(new hosts), 128

Scaly bark, of Citrus spp., 138

Scilla: Botrytis spp., 6 Sclerospora macrospora, on Sorghum halepense, 126 Sclerotinia draytoni, 4 --- minor, 155 --- sclerotiorum, 152, 153 --- trifoliorum, 138, 152 Sclerotium rolfsii, 78, 128, 130, 137, 151 152; on Philodendron cordatum, 130 Scolecotrichum graminis, 128 Scolytus multistriatus, 146 Scurf, of potato, 154 Selenophoma donacis var, stomaticola, 126 Septoria spp.: fungicidal efficacy, 54 --- apii, 58 --- apii-graveolentis, 58 --- chrysanthemi, 58 --- leucanthemi, 58 --- lycopersici, 58 --- nodorum, 126, 135 --- petroselini, 68 --- rubi, 68 Sesamum spp.: Fusarium wilt, 149 Shallot: pink root, 150 Slugs, on Peperomia obtusifolia var. variegata, 143 Small grain diseases, in Texas, 134 Smut, of corn, 136; onion, 150 ---, covered-kernel, of Sorghum spp., 134 ---, head, of Bromus marginatus, 136 ---, loose, of wheat, 135 Snowmold, of wheat, 135 Soil fumigation for nematodes, factors affecting results with, 98; practical aspects of, 95 Soil rot, of sweetpotato, 151 Some new and important plant disease occurrences and developments in the U.S. in 1953, Suppl. 229, pp. 122-154 Sooty blotch, of apple, 139 Sorghum spp.: smut infested seed, 17 fungicides tested, 134 --- halepense: downy mildew, 134; 1st rept. from La., 126 South America, 37 South Carolina, 78, 80, 89, 140, 144, 148, 149, 151 South Dakota, 135 Southern blight, of Lotus uliginosus, 128, 137; of tomato, control by chlorobromopropene, 152 Soybean: Belonolaimus gracilis, 137; diseases in Iowa, 137; downy mildew, 137; iron deficiency, sting nematode assoc., 78; Rhizoctonia aerial blight, 137 Spergon, 38 Spermospora subulata, 128 Sphaceloma hederae, 142 --- rosarum, 143 Sphacelotheca sorghi, 134

Sphaerotheca spp., on Rosa spp., 143
"Spikelet drop", of oats, 134
Spreading decline, of avocado, 140;
of Citrus spp., 138, 140
Squash: bacterial leaf spot, 151
Stem canker, of blueberry, 141

--- pitting, of Citrus spp., 138, relation to tristeza in South Africa and Brazil, 138 Stem rust of oats, 134; Poa, 137; wheat 135

Stemphylium botryosum, 137 --- f. lactucum, 132

--- loti, n. sp., 128

Strains (see also races), of alfalfa mosaic virus causing mottle in beans, 153; of cucumber mosaic virus from pepper and alfalfa causing ring spot of sweet pepper, 151; of curly top virus, 146, in potato 154; of late blight fungus on tomato not formerly present in Fla., 152; of Peronospora manshurica on soybean in N. C., 137; of tobacco ring spot virus assoc. with pimples disease of watermelon in Texas, 151

--- A and B, of the strawberry latent virus, 139

---, new, of bean rust, 153

Strawberry (see also Fragaria) Dematophora root and crown rot, 1st rept. on this host (Calif.), 129; dwarf, 139; gray mold, 139; red stele, in Oregon, 139; Strawberry dwarf, of Fragaria spp., 139

Streptomyces ipomoea, 151

--- scabies, 154

Streptomycin, 139, 141

Stripe rust, of grasses (new hosts), 128

Sugar beet, see Beta

Sugarcane: growth-retarding disease, 149

Sulphur, 143

Sulphur lead arsenate, 143

Sumatra, 143

Susceptibility, of bean leaves to tobacco mosaic virus, 153; of Gladiolus vars. to Botrytis leaf blight, 13

Sweetpotato: breeding for resistance to rootknot nematode, 92; circular spot, 151; internal cork (virus), 151; mosaic (virus), 152; soil fumigation for control of nematodes, black rot and wireworms, 78; soil rot, 151

Switzerland, 54

Synchytrium endobioticum, 154

Syringa japonica: witches'-broom (virus), 143
--- vulgaris: witches'-broom (virus), 143

Systox, 142

Tamarix pentandra: bacterial parasite, 1st rept. on tamarisks (Ariz., N. Mex., Tex), 132

Target leaf spot, of Hevea brasiliensis, 38 Tennessee, 129, 130, 147, 148 Terramycin, 139, 140 Texas, 78, 129, 132, 134, 136, 144, 147, 149, 152, 153

Theobroma cacao: pod rot, 49

Thielaviopsis basicola, 142, 147, 148

Tilletia spp., 134

--- brevifaciens, 135

--- caries, 128, 135

Tobacco (see also Nicotiana): bacterial wilt, 148; black root rot, 148; black shank, 148, Meloidogyne sp. assoc., 77; blue mold, 148; false broomrape, 149, 1st rept. (Ky., Fla.,), 131; Fusarium wilt, 148; leaf curl (virus), 131; mosaic virus, new serological test, 149; nematodes, problems in breeding for resistance to, 89; powdery mildew, 148; ring nematode, 80; Tylenchorhynchus claytoni, 80, 83, 149; wildfire, 148, 149

Tomato: bacterial spot, control with Agrimycin, 152; Fusarium wilt, 152, root knot nematode assoc., 78; Glomerella phomoides sp. nov., 152; internal browning, 152; late blight, 152; Meloidogyne incognita, 152; new virus disease (Ill.), 133; potato virus Y, 152; sandstorm damage, 153; southern blight, 152

Topple disease, of Iris sp., 142 Trichodorus, 83, 90, 102, 138, assoc. with avocado roots, 140

Trifolium pratense: crown rot, 138; diseases, prevalence and severity of, in Wis., 137

--- repens: Heterodera schachtii var. trifolii, 138

--- var. Ladino: diseases, prevalence and severity of, in Wis., 137; mosaic virus disease complex, 138

Triton B-1956, 139

Tritonia: Botrytis gladiolorum, 5

Tulipa: Botrytis spp., 6 Turnip: Botrytis spp., 5

Tylenchorhynchus claytoni, 80, 83, 149

--- dubius, 80, 147

Utah, 154

Typhula spp., on wheat, 135

Ulmus spp.: phloem necrosis virus, 146;
Dutch elm disease, 146
Uredo phoradendri, 130
Urocystis cepulae, 150
Uromyces phaseoli var. typica, 153
Ustilago avenae, 134
--- bullata, 136
--- kolleri, 134
--- maydis, 136
--- tritici, 135

Valsa leucostomoides, on Acer saccharum, 144

```
Variegation, leaf and flower, of camellia,
     transmission by grafting, 142
 Vegetable seed treatment tests for improved
     emergence, 149
 Venturia inaequalis, 139
 Vermont, 144
 Verticillium albo-atrum, 127, 147
 --- wilt, of Prunus avium, 127
 Viburnum opulus var. roseum: anthracnose,
     143
 Virginia, 135, 140, 148
 Virus diseases: alfalfa mosaic on bean,
 --- --: aster yellows of Dianthus spp.,
    142
--- big vein of lettuce, 152
--- calico of potato, 154
--- --: cereal yellow dwarf of Gramineae,
    137
--- --: curly top of Beta vulgaris, 146;
    of potato, 154
--- : exocortis of Citrus spp., 126
--- --: internal cork of sweetpotato, 151
--- : latent virus of strawberry, 139
--- --: leaf curl of tobacco, (Ky.), 131
--- : mosaic, of Datura meteloides,
    149; lettuce, 152; Nicotiana glauca,
    149; sweetpotato, 152; watermelon,
    133
--- --: mosaic disease complex of Tri-
    folium repens var. Ladino, 138
--- : new virus disease of citrus, 128;
   tomato, 133
--- --: Noordam's B virus in the U. S.,
   on chrysanthemum, 142
--- --: phloem necrosis of elm, 146
--- : phony disease of peach and plum,
    140
--- --: Pierces's disease of grape, 141
--- --: potato calico in Chenopodium
    album, 130
--- --: potato virus Y in tomato, 152
--- --: of red raspberry, technique for
    indexing for, 141
--- --: ring spot, of blueberry, 141;
    Ligustrum ovalifolium, 144; peach, 140;
    sweet pepper, 151; ring spot-like virus
    of curly dock, 153, of rhubarb, 153
--- --: seed-borne virus in barley, 134
--- --: soil-borne, of oats 134; of wheat
   135;
--- : striate mosaic on wheat, 136
--- : tobacco mosaic virus of bean, 153
--- --: tobacco-ringspot virus, strain of,
    on lettuce in Calif., 132
--- --: virus disease complex of pea, 153
--- --: wart of peach, 127
--- : western aster yellows of Gladiolus
   spp., 142
```

--- --: western X-disease of peach, 127

--- --: witches' broom of alfalfa, 138; of

Ligustrum obtusifolium var. regelianum,

143; Syringa spp., 143 --- : yellow watermelon mosaic (Marmor citrulli flavidanum), 133 Walnut: see Juglans Walnut branch wilt, of fig, 129 Wart, of potato, 154 Washington, 3, 126, 128, 135, 139, 141, 142, 150, 154 Washingtonia filifera: Phytophthora trunk rot, 1st rept. on this host (Calif.), 131 Watermelon: anthracnose, 151; mosaic virus (Marmor citrulli sp. nov.), (Fla.), 133; pimples, 151; yellow watermelon mosaic virus (Marmor citrulli flavidanum var. nov.), (Fla.), Weather of 1953, general, 122, drought, 124, destructive storms, 124, maps, 123 Weather injuries: drought and frost injuries, 145; sandstorm damage to tomato, 153 West Virginia, 145 Wheat: bunt, 135; copper carbonate slurry injurious to seed, 135; Corynebacterium tritici, Anguina tritici assoc., 78; Dilophospora alopecuri, Anguina tritici assoc., 78; dwarf bunt, 135; Fusarium nivale, fungicide tests for control of, 135; glume blotch, 135, 1st rept. from Fla., 126; leaf rust, 135; leaf spot, 135; loose smut, 135; powdery mildew, 135; root rot, 135; snowmold, 135; soilborne mosaic virus, 135; stem rust, sulfa drugs for control of, 135; striate mosaic in S. Dak., similar to cereal virus diseases in U.S.S.R., 136; Typhula spp., control, 135 White mold, of bean, 153 Wildfire, of tobacco, 148, 149 Wilt, of cotton, 147 ---, oak, of Quercus spp., 144; of Quercus agrifolia, Q. chrysolepis, 131, Q. ilicifolia, 132 Wisconsin, 132, 150, 153 Xanthomonas hortorum, 142 --- malvacearum, 147 --- oryzae new var., 129 --- phaseoli, 153 --- pruni, 140 --- ricinicola, 129, 149 --- vesicatoria, 150, 152 Xiphinema, 102 --- americanum, 138

Zerlate, 150

Zinc sulfate, 151

Zineb, 144, 149, 151

Zygophiala jamaicensis, 140

ERRATA

On page 78, line 14, read Fusarium oxysporum, instead of Fusarium oxysporium

On page 114, 1st line of title read VARIATION IN PATHOGENICITY instead of VARIATION IN PATHOGENCITY.

On page 131, under Fan Palm read (Washingtonia filifera) instead of (Washington filifera)

On page 148, 3rd paragraph, line 8, read Pseudomonas solanacearum instead of Pseudomonas solancearum.

